

### Amendments to the Specification

Please replace the paragraph that begins on page 8, line 14 with the following amended paragraph:

FIGS. 7A and 7B comprise is a diagrammatic representation of a servo burst pattern written by an example self-servo writing process according to the present invention;

Please replace the paragraph that begins on page 8, line 18 with the following amended paragraph:

FIGS. 9A and 9B is comprise a diagrammatic representation of a servo burst pattern written according to the self-servo writing steps in FIG. 8.

Please replace the paragraph that begins on page 20, line 20 with the following amended paragraph:

FIGS. 7A and 7B comprise shows a diagrammatic representation of an example self-servo writing (SSW) process according to the present invention. Four tracks 132, designated as tracks N, N+1, N+2 and N+3, are shown. Tracks N+1 and N+3 are shown with no SSW position error (SSW\_RRO), and tracks N and N+2 are shown with SSW positioning error (in opposite radial directions). The 'inconsequential bursts' serve to isolate adjacent tracks and prevent any correction accumulation.

Please replace the paragraph that begins on page 21, line 18 with the following amended paragraph:

FIG. 8 shows a more detailed flowchart of the steps of another example self-servo writing (SSW) process, according to the present invention. FIGS. 9A and 9B comprise is a diagrammatic example of a method of self-writing servo burst patterns using steps such as those shown in FIG. 8. For simplicity, the steps in FIG. 8 are also shown in FIGS. 9A and 9B, from bottom to top in sequence, and each step is aligned with the respective burst writing/trimming operation. The SSW process is described for four tracks 132, designated as tracks N, N+1, N+2 and N+3 in FIGS. 9A and 9B. Tracks N+1 and N+3 are shown with no SSW position error (SSW\_RRO), and tracks N and N+2 are shown with SSW positioning error (in opposite radial directions). The ‘inconsequential bursts’ serve to isolate adjacent tracks and prevent any correction accumulation.

Please replace the paragraph that begins on page 22, line 6 with the following amended paragraph:

In FIGS. 9A and 9B, the servo bursts A, B, C and D define the tracks N, N+1, N+2 and N+3 as shown, and correspond to different track “modes” (e.g., TM1, TM3, TM5 and TM7). Each track mode indicates the sequence in which the bursts are written/trimmed, and the corresponding PES is based on combinations of the burst difference values corresponding to the track mode. For example, track mode TM1 corresponds to the burst combination  $PES = -(A-B) + (C-D)$ , the track mode TM3 corresponds to the burst combination  $PES = (A-B) + (C-D)$ , the track mode TM5 corresponds to the burst combination  $PES = (A-B) - (C-D)$ , and the track mode TM7

corresponds to the burst combination  $PES = -(A-B)-(C-D)$ . Other track modes TM0, TM2, TM4, TM6 are used for two burst tracks (i.e., A and B bursts).

Please replace the paragraph that begins on page 22, line 16 with the following amended paragraph:

In this example, writing the 4-burst pattern herein is performed in eight steps which represent the four different track modes. The process starts at a track mode (e.g., TM1), and cycles through the track modes depending on the steps in the eight-step process, as shown by the example in FIGS. 9A and 9B and described hereinbelow. As those skilled in the art will appreciate, the present invention is applicable to other burst patterns and other burst numbers (e.g., 6 burst system) by taking into account the burst relationships and how the bursts trim one another. The present invention is also applicable to other servo writing methods such as servo writing by multiple trims of one or more servo bursts.

Please replace the paragraph that begins on page 23, line 4 with the following amended paragraph:

As an overview, referring to FIGS. 9A and 9B, in writing the servo bursts for track N using track mode TM7, first all the A bursts are written in a revolution. Then, in another revolution all the C bursts for the track N are written. Then, in another revolution the B bursts are written wherein each B burst trims the bottom edge of a corresponding A burst (represented as a dashed box, designated "*A trimmed*"). As each A burst is trimmed, the instantaneous PES (PES\_RRO) at that location is stored in memory, wherein the instantaneous PES information indicates the position of the A, B seam 130d.

The recorded PES\_RRO values are then used to determine correction/offset values that are used in another revolution for writing the D bursts at positions that trim the C bursts, such that the position of C, D seams 130e compensate for mis-positioning of the corresponding A, B seams 130d. The D bursts are written wherein each D burst trims the edge of a corresponding C burst (represented as a dashed box, designated "*C trimmed*"), creating the C, D seams 130e.

Please replace the paragraph that begins on page 23, line 18 with the following amended paragraph:

Now referring to the steps in FIG. 8 in conjunction with the diagram in FIGS. 9A and 9B (starting from track N+3 at the bottom of FIG. 9B, and moving from the bottom to the top of FIG. 9A), the detailed steps for writing the servo bursts for the four tracks N, N+1, N+2 and N+3 are described, wherein: